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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/771,292	01/25/2001	Rosanne Park Toohey	50277-1521	9181

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EXAMINER

NGUYEN, TAM V

ART UNIT	PAPER NUMBER
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2172

DATE MAILED: 03/17/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/771,292

Applicant(s)

TOOHEY ET AL.

Examiner

Tam V Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 January 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-24 are pending in this office action. Claim 1-24 are presented for examination. This office action is in response to the filing dated 01/25/01.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-24 are rejected under 35 U.S.C. 102(e) as being anticipated by Gupta et al. (US 6438562B1).

Re claim 1, a method of modifying data in a database system, the method comprising the steps of constructing work granules that manipulate rows in a manner that groups the rows within said work granules according to logical storage units that contain the rows, (col. 14, lines 62-col. 15, lines 24); and during execution by an entity of a particular work granule that involves manipulation operations for rows in a particular logical storage unit, (col. 14, lines 62-col. 15, lines 24): causing said entity to perform said manipulation operations for rows completely contained in said logical storage unit, (col. 14, lines 62-col. 15, lines

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21); determining a set of spanning rows (Gupta shows table 2, items 211-216) that are partially contained in said logical storage unit and that satisfy a particular condition, (col. 4, lines 42-col. 5, lines 13); and causing said entity to perform said manipulation operations for all pieces of all spanning rows in said set of spanning rows, (col. 4, lines 42-col. 5, lines 13).

Re claims 2 and 14, the method of Claim 1, wherein said particular condition is that each spanning row in said set start in said logical storage unit, (col. 4, lines 42-col. 5, lines 13).

Re claims 3 and 15, the method of Claim 1, wherein: said work granules include: a first work granule that involves manipulation operations for a first logical storage unit that includes a portion of a row, and a second work granule that involves manipulation operations for a second logical storage unit that also includes another portion of said row, (col. 14, lines 62-col. 15, lines 24); the method further includes: during execution of said first work granule, determining that said row satisfies said particular condition, and in response to determining that said row satisfies said particular condition, performing a manipulation operation for said row, (col. 14, lines 62-col. 15, lines 24); and during execution of said second work granule, determining that said row does not satisfy said particular condition, and in response to determining that said row does not satisfy said particular condition, foregoing any manipulation operation for said row, (col. 14, lines 62-col. 15, lines 24).

Re claims 4 and 16, the method of Claim 1, wherein said work granules are executed as part of transaction that includes a first subtransaction and a second subtransaction, wherein a first work granule is executed as part of said first subtransaction and a second work granule is executed as part of said second subtransaction, (col. 13, lines 49-col. 14, lines 14).

Re claims 5 and 17, the method of Claim 4, wherein said first work granule involves manipulation operations for a first logical storage unit that includes a portion of a row, (col. 13, lines 49-col. 14, lines 14); said second work granule involves manipulation operations for a second logical storage unit that also includes another portion of said row, (col. 14, lines 62-col. 15, lines 24); and the method further includes executing a manipulation operation for said row as part of said first subtransaction, (col. 14, lines 62-col. 15, lines 24).

Re claims 6 and 18, the method of Claim 5, wherein said first logical storage unit contains a first transaction list with a first entry, wherein said second logical storage unit contains a second transaction list with a second entry, wherein said step of executing a manipulation operation for said row includes assigning ownership of said first entry and said second entry to said first subtransaction, (col. 13, lines 49-col. 14, lines 14).

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Re claims 7 and 19, the method of Claim 1, wherein said particular logical storage unit includes a data block in said database system, (col. 3, lines 66-col.4, lines 13).

Re claims 8 and 20, a method of inserting rows into logical storage units that store information in a database system, the method comprising the steps of: inserting a first row piece of a spanning row into a first logical storage unit, (col. 4, lines 43-col. 5, lines 13); prior to inserting a second row piece of said spanning row into a second logical storage unit, determining whether one or more criteria is satisfied, wherein said one or more criteria include that said second logical storage unit has enough space allocated to identify at least a threshold number of interested transactions, (col. 4, lines 43-col. 5, lines 13); and inserting said second row piece of said spanning row into said second logical storage unit only when said one or more criteria are satisfied, (col. 4, lines 43-col. 5, lines 13).

Re claims 9 and 21, the method of Claim 8, wherein a data structure in each logical storage unit of said logical storage units is used to identify interested transactions for said each logical storage unit, (col. 4, lines 43-col. 5, lines 13).

Re claims 10 and 22, the method of Claim 9, wherein said data structure is a transaction list with entries, wherein each entry of said entries may be owned by an interested transaction, (col. 2, lines 21-49).

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Re claims 11 and 23, the method of Claim 8, wherein said one or more criteria include that said second row piece be the second or greater row piece in said spanning row, (col. 4, lines 43-col. 5, lines 13).

Re claims 12 and 24, the method of Claim 8, wherein said threshold number is greater than the sum of the quantity of overflow row pieces stored in said second logical storage unit after inserting said second row piece, (col. 4, lines 43-col. 5, lines 13).

Re claim 13, the subject matter of claim 13 are rejected in the analysis above in claim 1; therefore, claim 13 is also rejected for the same reasons as given in claim 1.

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Gautam et al. (US 5956704) shows method and apparatus for parallelizing operations that insert data into an existing data container.

Taylor et al. (US 6518974B2) shows pixel engine.

Jakobsson et al. (US 5848408) shows method for executing star queries.

Aninsbury et al. (US 6078924) shows method and apparatus for performing data collection, interpretation and analysis, in an information platform.

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Contact Information

5. Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tam V Nguyen whose telephone number is (703) 305-3735. The examiner can normally be reached on 7:30AM-5: 00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Yen Vu can be reached on (703) 305-4393. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 746-7239 for formal communications and (703) 746-7240 for informal communications.

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, Virginia 22202. Fourth Floor (Receptionist).

5. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

TV:tv


**JEAN M. CORRIELUS
PRIMARY EXAMINER**